

CLAIM AMENDMENTS

Please amend the claims by canceling claims 1-3, 6-13 and 16, without prejudice, as indicated on the following listing of all the claims in the present application after this Amendment:

1 – 3. (Cancelled)

4. (Previously presented) A method of identifying and correcting defective ones of an array of photo-sensitive pixels, comprising:

- directing an object field of varying light intensity across the array,
- calculating difference values between outputs of individual ones of the pixels and a plurality of neighboring pixels,

- if the difference values for a given one of the pixels have different signs, utilizing the output of the given pixel for data of the object field,

- if the difference values for the given pixel have the same sign, determining whether the difference values are in excess of a threshold, wherein said threshold includes either of at least first or second quantities that are different from each other depending upon a distance between the given pixel and individual ones of its neighboring pixels,

- if the difference values are not in excess of the threshold, utilizing the output of the given pixel for data of the object field, and

- if the difference values are in excess of the threshold, calculating a value of the given pixel from at least some of the neighboring pixels and utilizing the calculated pixel value for data of the object field.

5. (Previously presented) A method of identifying and correcting defective ones of an array of photo-sensitive pixels, comprising:

- directing an object field of varying light intensity across the array,
- calculating difference values between outputs of individual ones of the pixels and a plurality of neighboring pixels,

if the difference values for a given one of the pixels have different signs, utilizing the output of the given pixel for data of the object field,

if the difference values for the given pixel have the same sign, determining whether the difference values are in excess of a threshold, wherein a value of said threshold is dependent upon both (a) whether said same sign is positive or negative and (b) a distance between the given pixel and individual ones of its neighboring pixels,

if the difference values are not in excess of the threshold, utilizing the output of the given pixel for data of the object field, and

if the difference values are in excess of the threshold, calculating a value of the given pixel from at least some of the neighboring pixels and utilizing the calculated pixel value for data of the object field.

6 – 13. (Cancelled)

14. (Previously presented) A method of generating a sequence of signal outputs from individual photo-sensitive elements in an array while the array is illuminated with an object field of varying light intensity thereacross, comprising:

calculate a plurality of difference values between outputs of individual ones of the elements and outputs of a plurality of neighboring elements,

determine the signs of the difference values for a given one of the individual elements in sequence,

if the difference values for the given one of the individual elements have different signs, utilize the actual output of the given element as one of the sequence of signal outputs of the array, and

if the difference values for the given element have the same signs, only then

proceed to compare magnitudes of the difference values with at least one threshold, and

if the difference values exceed the threshold, calculate a quantity corresponding to the output of the given element from the outputs of the neighboring elements and use the

calculated quantity as said one of the sequence of signal outputs of the array instead of the actual output,

wherein said at least one threshold includes at least first and second threshold quantities that are different from each other, and

wherein comparing magnitudes of the difference values with the at least one threshold includes comparing individual difference value magnitudes with one of the first or second threshold quantities depending upon a distance of the neighboring element from the given element that is used to calculate the difference value.

15. (Previously presented) A method of generating a sequence of signal outputs from individual photo-sensitive elements in an array while the array is illuminated with an object field of varying light intensity thereacross, comprising:

calculate a plurality of difference values between outputs of individual ones of the elements and outputs of a plurality of neighboring elements,

determine the signs of the difference values for a given one of the individual elements in sequence,

if the difference values for the given one of the individual elements have different signs, utilize the actual output of the given element as one of the sequence of signal outputs of the array, and

if the difference values for the given element have the same signs, only then

proceed to compare magnitudes of the difference values with at least one threshold, and

if the difference values exceed the threshold, calculate a quantity corresponding to the output of the given element from the outputs of the neighboring elements and use the calculated quantity as said one of the sequence of signal outputs of the array instead of the actual output,

wherein said at least one threshold includes a plurality of threshold quantities that are different from each other, and wherein comparing individual difference value magnitudes with the at least one threshold includes comparing a difference value magnitude with one of the plurality of threshold quantities selected on the basis of (a) whether the sign of the difference

value magnitude is positive or negative and (b) a distance between the given element and the neighboring elements used to calculate the difference value.

16. (Cancelled)